

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

<i>In re</i> Application of	)	
	)	Group Art Unit: 1643
Schneck <i>et al.</i>	)	
	)	Examiner: C. H. Yaen
Serial No. 09/642,660	)	
	)	
Filed: August 22, 2000	)	Atty. Docket No. 01107.00042

FOR: **CELL COMPOSITIONS COMPRISING MOLECULAR COMPLEXES  
THAT MODIFY IMMUNE RESPONSES**

**REPLY BRIEF**

U.S. Patent and Trademark Office  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir:

This Reply Brief timely responds to the Examiner's Answer mailed February 22, 2007.  
A Request for Oral Hearing accompanies this Brief.

### **STATUS OF CLAIMS**

Claims 1-27 and 33-50 are canceled. Claims 28-32 and 51-60 are pending. Claims 59 and 60 are allowed. Claims 28-32 and 51-58 are rejected. Appellants appeal the rejection of claims 28-32 and 51-58.

**GROUND OF REJECTION TO BE REVIEWED**

1. Whether claims 32 and 56-58 are sufficiently described under 35 U.S.C. § 112 ¶ 1.
2. Whether claims 28-32 and 51-55 are patentable under 35 U.S.C. § 103(a).

## ARGUMENT

1. Whether claims 32 and 56-58 are sufficiently described under 35 U.S.C. § 112 ¶ 1.

Claim 32 recites that “an identical antigenic peptide is bound to each ligand binding site” of the recited molecular complex. The Examiner contends that the specification does not describe the genus of antigenic peptides. Antigenic peptides *per se* are not the claimed invention; they are well known elements which can be used in the claimed invention.

It is black letter law that a specification need only describe that which is new or not conventional in the art. *Hybritech v. Monoclonal Antibodies*, 802 F.2d 1367, 1384, 231 U.S.P.Q. 81, 94 (Fed. Cir. 1986). As the Examiner acknowledges, antigenic peptides are neither new nor unconventional.<sup>1</sup>

The rejection under 35 U.S.C. § 112 ¶ 1 has no legal foundation. The specification adequately describes the subject matter of dependent claims 32 and 56-58 because it describes the new and unconventional subject matter encompassed within those claims. There is no legal requirement to describe that which is conventional. *Hybritech*, 802 F.2d at 1384; 231 U.S.P.Q. at 94; M.P.E.P. § 2163(II)(A)(3)(a).

---

<sup>1</sup> See, e.g., Final Office Action at page 3, lines 18-19; Examiner’s Answer at page 12, lines 11-12.

2. Whether claims 28-32 and 51-55 are patentable under 35 U.S.C. § 103(a).

Rejected claims 28-32 and 51-58 are directed to compositions comprising a cell in which a molecular complex is bound to the surface of the cell. The Examiner contends the claimed invention is obvious over a combination of four references (Matsui, Dal Porto, Chang, and Harris). The Examiner did not evaluate the cited references under the proper legal standards. First, both the rejection and the Examiner's Answer consistently refer only to the advantages of producing soluble divalent molecular complexes (*e.g.*, page 18, lines 7-9, and page 21 lines 10-14 of the Examiner's Answer). The invention, however, is a composition comprising a cell in which a molecular complex is bound to the surface of the cell; *i.e.*, the claims do not encompass a soluble molecular complex. The combination of references does not teach or suggest binding a molecular complex bound to the surface of a cell. The Examiner has never addressed this deficiency, which alone is sufficient to defeat a *prima facie* case of obviousness.

Second, both the rejection and the Examiner's Answer ignore large portions of each reference, including teachings that explicitly teach away from the invention. Harris teaches away from using immunoglobulin heavy and light chains, which the recited molecular complexes contain. Chang teaches use of leucine zipper components to associate extracellular TCR domains, but the recited molecular complexes employ  $\beta$  pleated sheets, not a leucine zipper. Dal Porto teaches a molecule with a substantially different structure. Each of Matsui, Chang, Harris, and Dal Porto teaches soluble molecules. The Examiner selected isolated teachings of the cited references, modified them, and combined them without regard to what each of the references teaches as a whole. This is clear legal error. *Gore*, 721 F.2d at 1550, 220 U.S.P.Q. at 310; *Kotzab*, 217 F.3d at 1371, 55 U.S.P.Q.2d at 1317.

Properly considered in their entirety, the combination of Matsui, Chang, Harris, and Dal Porto do not make the recited molecular complex – let alone binding it to the surface of a cell – *prima facie* obvious.

Respectfully submitted,

BANNER & WITCOFF, LTD.

/Lisa M. Hemmendinger/

Date: April 22, 2007

By:

\_\_\_\_\_  
Lisa M. Hemmendinger  
Registration No. 42, 653

Customer No. 22907